In the Specification:

On page 1, after the title insert the following:

RELATED APPLICATIONS

This is a U.S. national stage of application No. PCT/DE2003/002954, filed on 5 September 2003.

This patent application claims the priority of German patent application no. 102 45 631.3, filed 30 September 2002, the disclosure content of which is hereby incorporated by reference.

FIELD OF THE INVENTION

On page 1, before line 12, insert the following heading:

BACKGROUND OF THE INVENTION

On page 1, amend the paragraph beginning on line 12 as follows:

Such a component is disclosed in published US patent application no. 2004/0099873 ~~DE 100 40 448 A1~~, for example, which describes a semiconductor chip having contact locations on both sides and a reinforcing layer, which semiconductor chip is reinforced by a thick contact layer and the reinforcing layer sufficiently to ensure that no carrier body is required for mechanically stabilizing the chip. An area-covering auxiliary carrier layer, which can be removed selectively with respect to the reinforcing layer, is additionally applied to the reinforcing layer. The selective removal of the auxiliary carrier layer enables the chips to be singulated without a sawing process.

On page 2, before line 1, insert the following heading:

SUMMARY OF THE INVENTION

On page 2, amend the paragraph beginning on line 1, as follows:

~~It is an~~ One object of the present invention ~~, therefore,~~ is to provide ~~develop~~ a semiconductor component of the type mentioned in the introduction which ~~at least~~ reduces the thermal stresses between the semiconductor layer and the carrier body or substrate. ~~, and to specify~~

Another object of the invention is to provide a method for producing semiconductor components (including the type mentioned above but not restricted thereto) in which more rapid fabrication of the component and a more reliable end product are achieved.

On page 2, delete the paragraph beginning on line 11 through line 15 in its entirety.

On page 2, delete the paragraph beginning on line 17 through line 23 in its entirety and insert the following:

These and other objects are attained in accordance with one aspect of the present invention directed to a semiconductor component having a light-emitting semiconductor layer or a light-emitting semiconductor element and two contact locations, wherein the component is arranged on a carrier substrate and the carrier substrate is patterned vertically or horizontally.

On page 4, amend the paragraph beginning on line 32 as follows:

~~The method according to the invention~~ Another aspect of the present invention is directed to a method for producing a semiconductor component ~~essentially has~~ which includes the following method steps:

On page 7, delete the paragraph beginning on line 19 through line 20 in its entirety and the paragraph beginning on line 22 through line 24 in its entirety.

On page 7, delete line 26 in its entirety and enter the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 9, before line 8, insert the following heading:

DETAILED DESCRIPTION OF THE DRAWINGS

On page 17, amend the paragraph beginning on line 4, as follows:

Substrate materials such as GaAs or silicon can readily be chemically dissolved. The growth substrate is lost in the process. In addition, the semiconductor must either itself be inert toward the etching solution or be equipped with special etching stop layers. A further possibility is to incorporate a sacrificial layer 100 (see Fig. 7A) into the semiconductor layer 2 which can be etched selectively. In this way, the growth substrate 1 is not lost and can also be reintroduced in the process.

On page 18, amend the paragraph beginning on line 1, as follows:

Furthermore, it is also possible to deposit the semiconductor layer 2 on an already laminated growth substrate 1. ~~Such~~ As shown in Fig. 7A, a laminated growth substrate 1 (e.g. SMARTCUT® or UNIBOND®) has, as the topmost layer, an adhesion layer 101 furnished with suitable desired breaking locations 102. At said locations, the thin semiconductor layer 2 is separated from the growth substrate 1 after the application of the carrier substrate 7.

On page 25, amend the paragraph beginning on line 18 as follows:

For the production of the components represented in Figures 3A, 4 and 6A, it is necessary to pattern the carrier substrate 7 or the carrier substrate islands 71. This patterning may be achieved for example by means of photolithography, a LIGA method or some other known method. With the aid of photolithography as an example, prior to the application of the carrier substrate 7, a suitable photoresist should be applied to the wetting layer 6, correspondingly exposed and etched, thereby obtaining the negative form of the vertical structure elements or the structure element 25 of the desired component. In order to achieve structure elements 25 having high aspect ratios, use is preferably made of a LIGA method or a photoresist suitable therefor (e.g. ma-P 100 or SU-8 from Microchem Corp. ~~Nano~~™).

On page 28, delete the paragraph beginning on line 6, through line 8 in its entirety.